

GEORGIA INSTITUTE OF TECHNOLOGY
School of Electrical & Computer Engineering

ECE 4175

Embedded Microcontroller Design
CALENDAR

Fall 2009

Date	Text/Handouts	Topics, Quiz Dates, and Holidays
8-17		Introduction
8-19	Chapter 2	Low-power operation
8-21	Chapter 3	Qwik&Low board; Project Two
8-24	Chapter 4	T1 template code
8-26	Chapter 8	Stepper motor use; Project Three
8-28	Chapter 5	LCD use
8-31	Chapter 9	Analog-to-digital converter; Potentiometer use
9-2	Chapter 7	Timer1 for looptime control; Project Four
9-4	Chapter 11	Timing measurements
9-7	Chapter 10	Rotary pulse generator use via polling
9-9		Project Five
9-11	Chapter 6	Number to ASCII-coded-digit conversion
9-14	Chapter 6	UART; PC monitor use; Timer 0
9-16	Chapter 2	Clock control; Project Six
9-18		Quiz review
9-21	Chapter 12	Interrupts
9-23		First Quiz
9-25		Quiz analysis; Project Seven
9-28	Chapter 10	Rotary pulse generator use
9-30		Project Eight
10-2	Chapter 9	Ratiometric temperature sensor
10-5		Fall Recess
10-7	Chapter 6	Math optimization for low power; Project Nine
10-9		Q&L Development Board and its use
10-12		Standard LCD character display
10-14		Standard interface of 5V LCD character displays; Project Ten
10-16		LCD interface
10-19	Chapters 6 and 13	Timing measurements using Timer0
10-21	Schematic & photo	Design Project - Part A
10-23		I2C/SMBus for feature enhancement
10-26	Chapter 15	1-wire interface; iButton operation
10-28		Outside speaker
10-30		Quiz review
11-2		CCP1/Timer1; CCP2/Timer3 use
11-4		Second Quiz
11-6		Quiz analysis
11-9		LCD display alternatives; non-multiplexed, 1/4- and 1/16-multiplexed displays
11-11		Outside speaker
11-13	Chapter 17	SPI for feature enhancement
11-16	Chapter 14	EEPROM use
11-18		Outside speaker
11-20	Card reader handout	Magnetic card reader use
11-23		Inclinometer of Glen Akins
11-25		No class; lab open for design project completion and demos
11-27		Thanksgiving
11-30		
12-2		Outside speaker
12-4		Final exam review
12-7	8:00-10:50	ECE 4175A Final Exam (Monday)
12-8	11:30-2:20	ECE 4175B Final Exam (Tuesday)